TECHNICAL MANUAL

PORTABLE OPTOMETRY CHAIR & STOOL

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CONTRACT NO. DAMD17-88-C-8231

ATLANTIC INDUSTRIES, INC.

999 JENKINS ROAD

HARDEEVILLE, S.C. 29927

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1.1 SCOPE

These instructions are published for the use of operating and maintenance personnel to whom the optometry chair set is issued. They provide information for the operation, maintenance and repair of the equipment. Also included is a Replacement Parts section, which illustrates and identifies replacement parts by part number and description.

1.2 DESCRIPTION

The Optometry Chair Set is a compact, easily transportable unit specifically designed for field use. The set consists of a chair mounted to the top of a storage chest, a phoroptic pole mounted to the chest behind the chair, and a padded three legged stool with adjustable height.

1.3 COMPONENTS

The chair consists of the following components:

FIND #	
2	Headrest assembly
3	Headrest padding
6	Chair back assembly
11	Chair seat assembly
10	Chair base assembly
7	Armrest assemblies
13 & 15	Leg and footrest assemblies
19	Leg assemblies for chest
5 & 8	Chair seat & back padding

The phoroptic pole assembly consists of the following components:

FIND #	
23	2 pole sections
22	Phoroptic pole adapter
24	Light holding bolt

The stool assembly consists of the following components:

FIND #	
27	Base tripod
28	Stool leg
26	Stool seat assembly
25	Stool cover

2.1 ASSEMBLY OF PORTABLE OPTOMETRY CHAIR - FIGURE 1-1

2.1.1 LEGS TO STORAGE CHEST

Place a leg under each corner at one end of the chest. Slightly tighten the strap between the two legs under the storage chest. Place the clip on the strap up on the lip on the top of the chest. Snap down the spring clip on the leg, pulling the strap tight. Repeat on other leg. Tighten strap between legs. Repeat entire procedure at other end of box.

2.1.2 OPTOMETRY CHAIR TO STORAGE CHEST TYPE III

Locate chair base support angles on top of chest in line with markings. Place end with two bolting plates facing forward. Wrap straps two (2) times around chest and attach wing turn clamp to buckle. Tighten straps; tighten wing clamps.

2.1.3 CHAIR SEAT TO BASE CHAIR ASSEMBLY

Place the chair seat over the chair base with the locking bar in front. Secure the chair seat to the top of the chair base assembly with a socket hex shoulder screw in each side of the chair seat.

2.1.4 CHAIR BACK ASSEMBLY TO CHAIR SEAT ASSEMBLY

Locate the chair back assembly with the wide section down and the sheet metal cover towards assembler. Place on top of chair seat. Extend the rod hinge thru the seat assembly and the chair back assembly. Insert hitch cotter pin in each side to secure hinge rod.

2.1.5 HEAD REST FRAME TO BACK FRAME

Depress pin latch in pin latch insert at top of chair back assembly and place headrest assembly on top of latch pin insert; release pin latch.

2.2 PHOROPTIC POLE

2.2.1 PHOROPTIC POLE ADAPTER TO STORAGE CHEST TYPE III

Locate phoroptic pole adapter with the markings on the chest cover. Loosen wing turn clamp (to the left), attach clip to chest cover and tighten.

2.2.2. POLE SECTION TO PHOROPTIC POLE ADAPTER

Thread bottom pole section into phoroptic pole adapter and the top pole section into the bottom pole section. The top pole section has the light holder bolt installed in the end.

2.3 STOOL

2.3.1 STOOL ASSEMBLY

Install three stool legs by depressing pin latch and insert into stool tripod. Screw the 9 inch allthread rod into the stool seat. Thread the rod into the stool tripod. Adjust the nut to secure the desired height.

3.1 OPERATION OF OPTOMETRY CHAIR

The actuator button can be located on either side of the chair back. Depressing this releases the cylinder and allows the chair back to recline with pressure on come forward with spring action. There is a control rod on both sides of the chair seat which can be pushed forward or backward releasing the chair seat to tilt.

4.0 REPLACEMENT PROCEDURE & PARTS

4.1 HYDROLOC CYLINDER - FIGURE 1-2

Remove socket shoulder screw from each side of the chair seat assembly. Depress button on end of quick release pin and remove from the chair back bracket. Unclip the slide mechanism that holds the actuator control to the cylinder shaft. Unscrew the jam nut on cylinder shaft. The cylinder is now free. Install replacement cylinder thru the hole in chair bracket. Install the jam nut and actuator control over the threaded cylinder shaft. Press the slide clip to secure the actuator control to the cylinder. Align cylinder and insert the quick release pin to secure cylinder to back frame.

4.2 ACTUATOR CONTROL - FIGURE 1-2

Remove chair from base and control as explained under hydroloc cylinder removal. Remove the snap ring on the top rear of the chair back frame assembly. Install replacement actuator by removing snap ring and fitting into hole in mounting bracket; secure with snap ring.

4.3 CONTROL ROD ASSEMBLY - FIGURE 1-3

Loosen two (2) set screws on coupling (1), collar (2), and the gear on the control rod. The rod will now slide out. Replace the components as shown.

4.4 LOCKING DISC WITH PIN - FIGURE 1-3

Loosen set screw in gear on shaft. Remove three (3) screws from cover plate. Lift up locking disc and shaft. Replace as shown.

4.5 SPRING PIN LATCH - STOOL & HEADREST - FIGURE 1-4

To remove depress pins and push out of tubing. Slip replacement latch into tubing and pop pins thru holes.

4.6 SPRING PIN LATCH - LEG REST & FOOT REST - FIGURE 1-5

To remove depress pins and push out of tubing. Slip replacement latch into tubing and pop pins thru holes.

5.0 REPLACEMENT PARTS

All items listed in this manual may be ordered as replacement parts. When ordering, please specify figure number and find number of each item. The replacement parts may be ordered from:

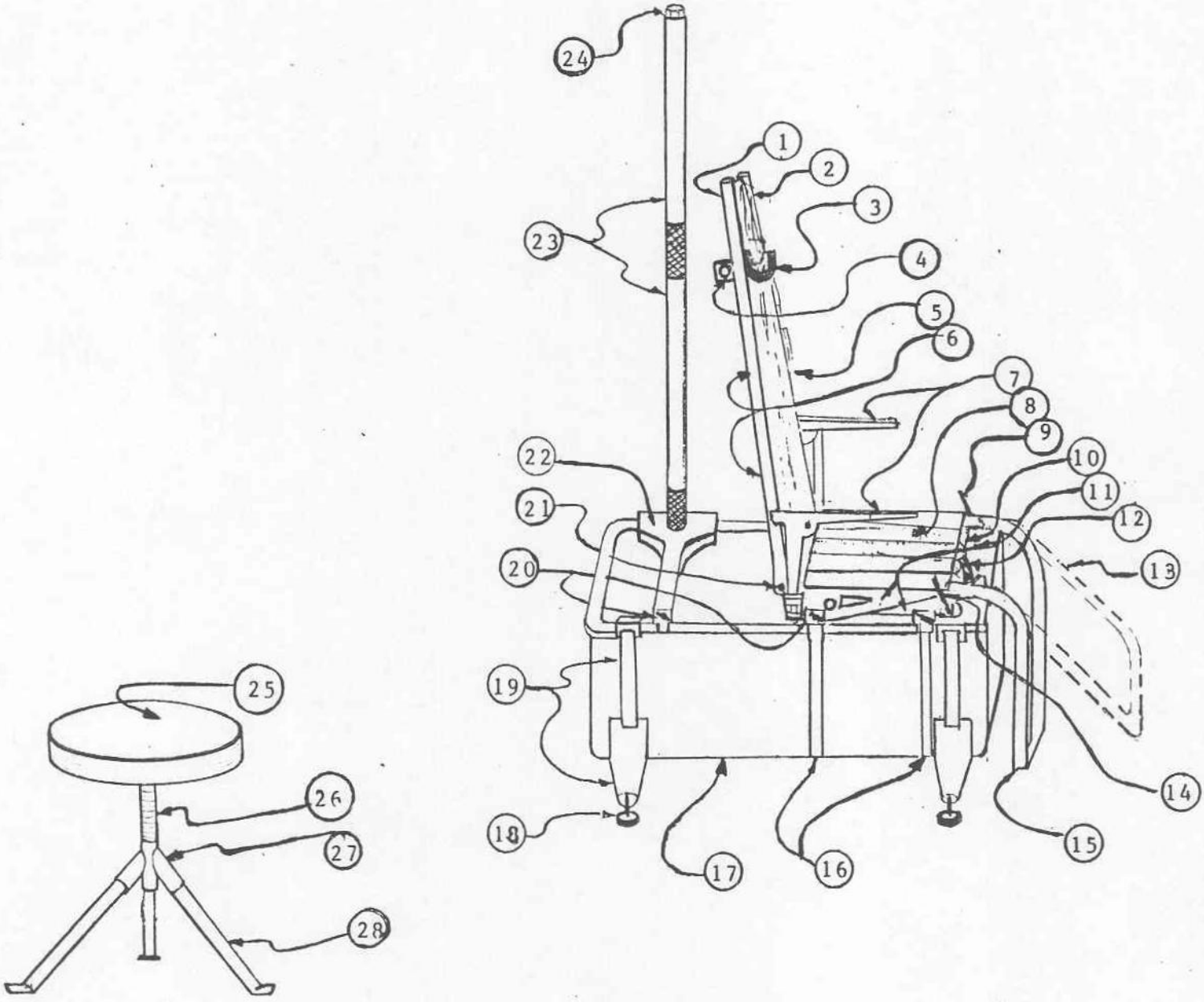
ATLANTIC INDUSTRIES, INC.
P.O. BOX 1169
999 JENKINS ROAD
HARDEEVILLE, S.C. 29927

(803) 784-3145

REPLACEMENT PARTS

OPTOMETRY CHAIR FIGURE 1-1

FIND #	PART #	DESCRIPTION
1	OC-001	Headrest assembly
2	OC-002	Headrest padding
3	OC-003	Cushion head & flap assy.
4	OC-004	Control actuator
5	OC-005	Chair back padding
6	OC-006	Chair back assembly
6A	OC-006A	Rivet - univ. hd. 1/8" dia.
6B	OC-006B	Drive screw type "U" cres 6 X .38 LG.
6C	OC-006C	Machine screw hex head 10-32 x 1.50 LG.
6D	OC-006D	Nut head #10-32 UNF 2B
7	OC-007	Armrest housing & assy.
7A	OC-007A	Split roll pin cres .187 x .750 LG.
7B	OC-007B	Split roll pin cres .250 dia. x 1.25 LG.
7C	OC-007C	Washer nylon 1062 THK. x .281 ID x .719 OD
8	OC-008	Cover seat padding
9	OC-009	Rod long control
10	OC-010	Base Assembly
11	OC-011	Chair base assembly
12	OC-012	Bar stop ratchet
13	OC-013	Leg rest assembly
14	OC-014	Rod short control
14A	OC-014A	Coupling sleeve shaft
14B	OC-014B	Collar w/set screw (1/4" wide)
14C	OC-014C	Miter gear w/set screw
15	OC-015	Foot rest
16	OC-016	Strap holding chair loop assembly
17	OC-017	Storage chest (NSN6545-00-914-3480)
18	OC-018	Leveler
19	OC-019	Strap leg assembly - chest
19A	OC-019A	Catch compression spring
19B	OC-019B	Screw machine pan hd. 10-24 2A .375 LG.
20	OC-020	Latch - wing turn #2
21	OC-021	Rod hinge
21A	OC-021A	Pin hitch cotter
22	OC-022	Phoroptic pole adapter
23	OC-023	Phoroptic pole
24	OC-024	Bolt light holder
25	OC-025	Seat stool
26	OC-026	Adjusting screw
27	OC-027	Tripod - stool weldment
28	OC-028	Leg stool
28A	OC-028A	Pin latch assembly
28B	OC-028B	Cushion stool
28C	OC-028C	Cover
28D	OC-028D	Locknut - 7/8 UNC.



1-1 OPTOMETRY CHAIR, STOOL, & POLE

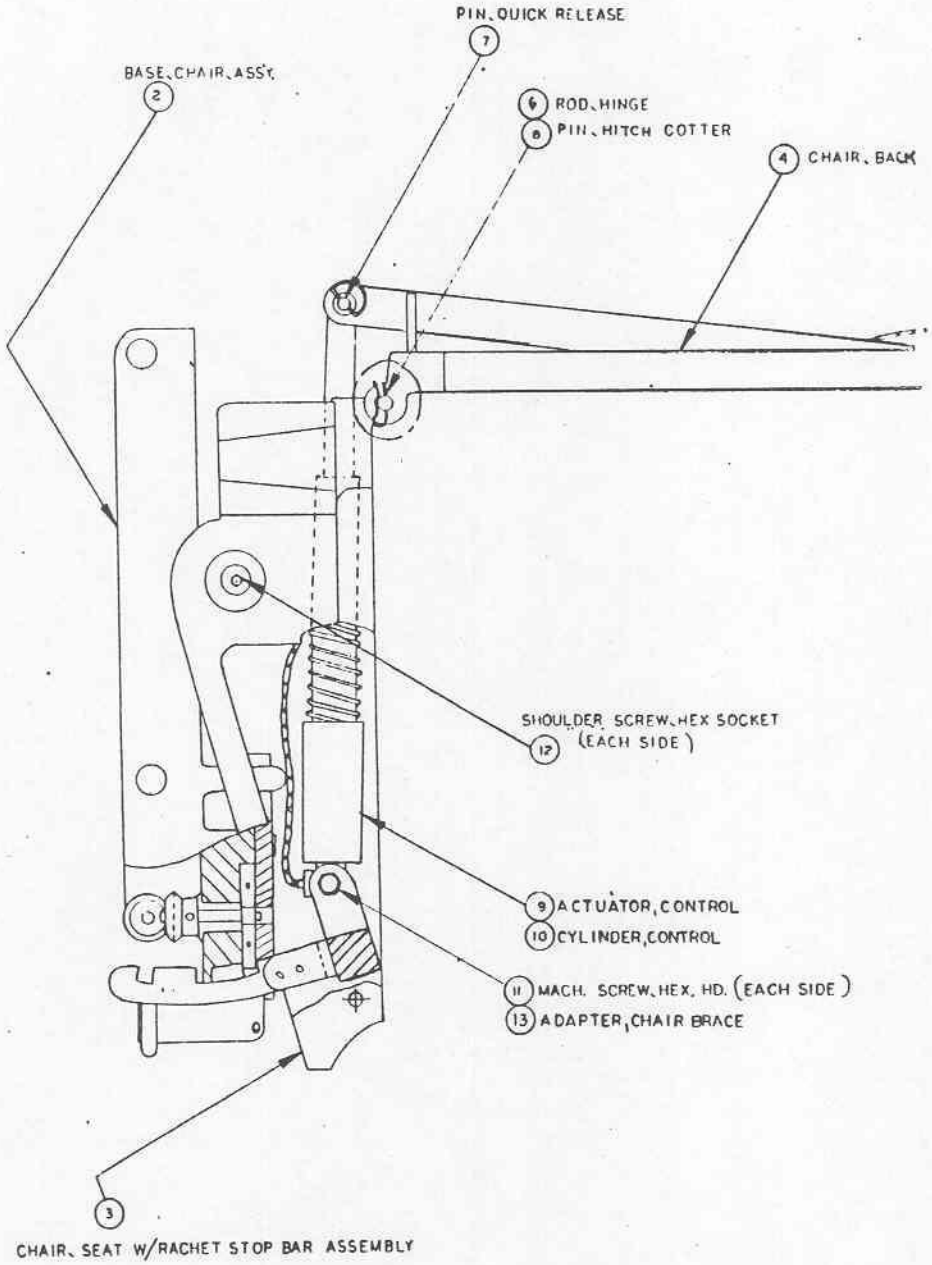

PIN, QUICK RELEASE
7
BASE, CHAIR, ASS'Y.
2
6 ROD, HINGE
8 PIN, HITCH COTTER
4 CHAIR, BACK
SHOULDER SCREW, HEX SOCKET
(EACH SIDE)
12
9 ACTUATOR, CONTROL
10 CYLINDER, CONTROL
11 MACH. SCREW, HEX. HD. (EACH SIDE)
13 ADAPTER, CHAIR BRACE
3
CHAIR, SEAT W/RACHET STOP BAR ASSEMBLY

FIGURE 1 - 2

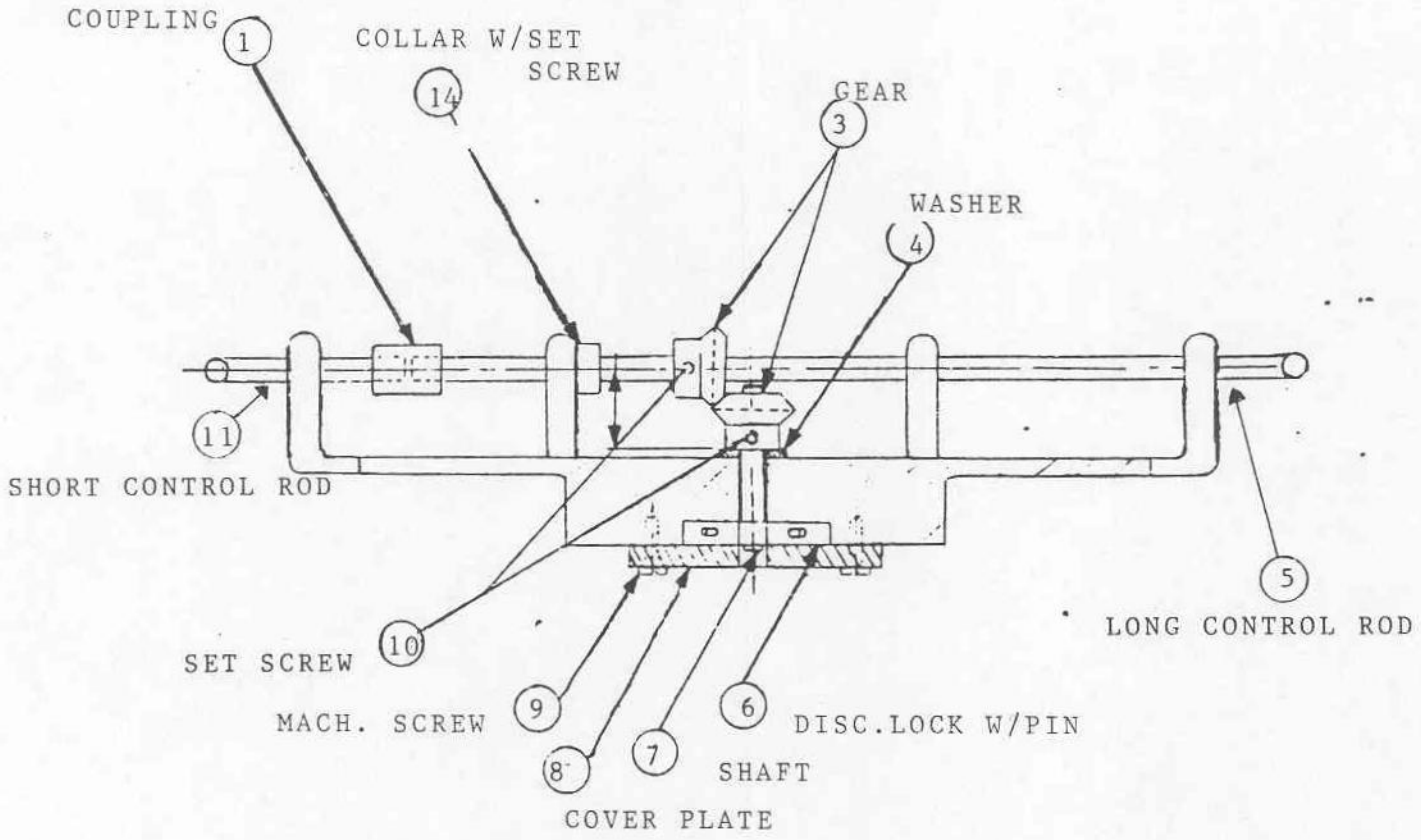


FIGURE 1-3

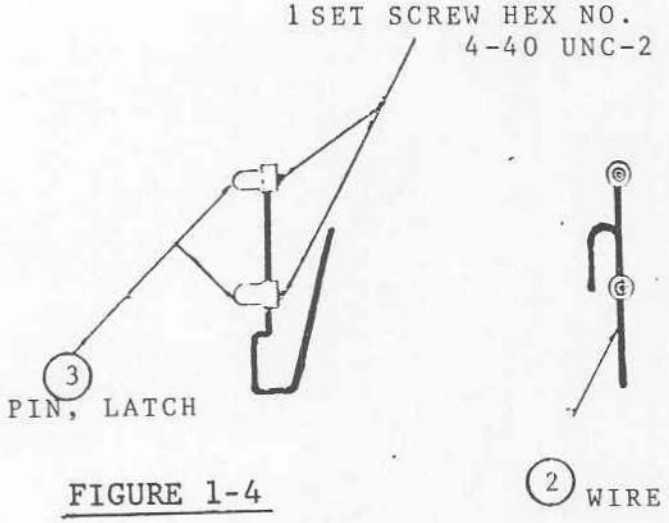


FIGURE 1-4

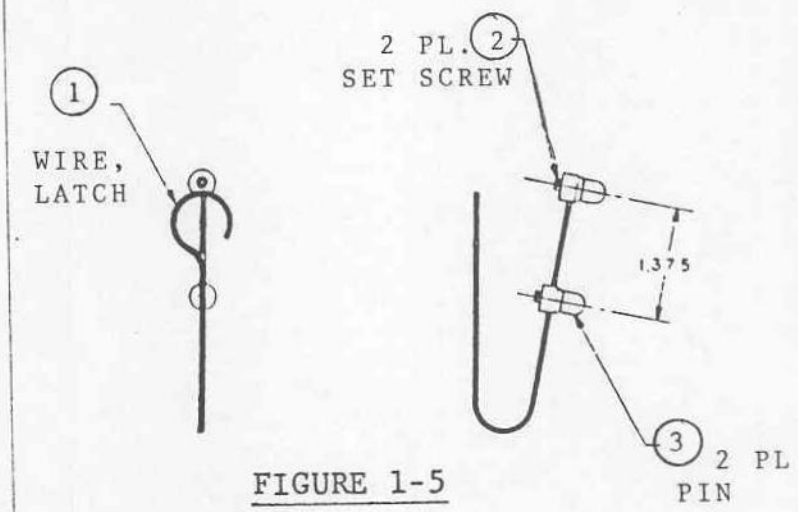


FIGURE 1-5